What is claimed is:

1. A pressure-sensitive adhesive composition based on (co)polymers of acrylic acid and/or methacrylic acid and/or derivatives thereof which has an at least two-phase domain structure and also an outgassing level of less than 10 µg/g, based on the weight of the composition, when measured by the tesa method.

2. The pressure-sensitive adhesive composition as claimed in claim 1, wherein at least some of the (co)polymers are block copolymers of the general type P(A)-P(B)-P(A), where
   - P(A) represents a homopolymer or copolymer block of the monomers A, possessing a glass transition temperature of from -80°C to 0°C,
   - P(B) represents a homopolymer or copolymer block of the monomers B, possessing a glass transition temperature of from 20°C to 175°C,
   - and the homopolymer or copolymer blocks P(A) and the homopolymer or copolymer blocks P(B) are insoluble in one another.

3. The pressure-sensitive adhesive composition as claimed in claim 1, wherein at least some of the (co)polymers are block copolymers of the general type P(B)-P(A)-P(B), where
   - P(A) represents a homopolymer or copolymer block of the monomers A, possessing a glass transition temperature of from -80°C to 0°C,
   - P(B) represents a homopolymer or copolymer block of the monomers B, possessing a glass transition temperature of from 20°C to 175°C,
   - and the homopolymer or copolymer blocks P(A) and the homopolymer or copolymer blocks P(B) are insoluble in one another.

4. The pressure-sensitive adhesive composition as claimed in either of claims 2 and 3, wherein the monomers A are selected from the group of the acrylates CH_2=CHCOOR and/or methacrylates CH_2=C(CH_3)COOR in which the groups R are alkyl radicals having from 4 to 14 carbon atoms, preferably those having from 4 to 9 carbon atoms.

5. The pressure-sensitive adhesive composition as claimed in any of claims 2 to 4, wherein at least some of the monomers A have a functional group R' which is capable of coordinative crosslinking.

6. The pressure-sensitive adhesive composition as claimed in any of claims 2 to 4, wherein at least some of the monomers A have a functional group R" which possesses a cohesion-enhancing effect for the homopolymer or copolymer P(A) and/or for the overall block copolymer.

7. A process for preparing a pressure-sensitive adhesive composition as claimed in at least one of the preceding claims, using a polyacrylate solution obtainable by free-radical polymerization, which comprises

a concentration process in which

- following polymerization, an entrainer is added to the polyacrylate solution,
- the polyacrylate solution with the added entrainer is passed into an extruder in which the polyacrylate solution is subjected to a carrier distillation,
- as a result of the concentration a polyacrylate composition of a kind is produced which is processed further from the melt

and the concentrated polyacrylate composition, where appropriate, is applied to a backing material.

8. The process as claimed in claim 7, wherein, following the concentration, a postpurification is carried out in at least one further step by adding the same or another entrainer to the concentrated polyacrylate composition and conducting a further carrier distillation in the extruder, preferably selecting in each case higher temperatures and lower vacuums than in the preceding distillation step.

9. The process as claimed in at least one of claims 7 and 8, wherein at least the extruder in the concentration step is a corotating or counterrotating twin screw extruder.

10. The process as claimed in at least one of claims 7 to 9, wherein steam is used as entrainer.

11. An adhesive tape, particularly for use in the electronics industry, comprising applied to one or both sides of a backing material at least one film of a pressure-sensitive adhesive composition as claimed in at least one of claims 2 to 6.

12. The adhesive tape as claimed in claim 7, wherein said backing material has a very low outgassing tendency, preferably of less than 5 µg/g.